

ABSTRACT

A liquid crystal display with multi-line inversion which reverses polarity of applied voltages every two or more rows for preventing the deterioration of liquid crystal. An LCD includes a data driver outputting analog gray voltages selected based on the image data to the data lines of the LC panel. The data driver includes a data line bias circuit biasing the data lines to an intermediate level voltage whenever displaying the pixels in one row. Accordingly, the amount of stored charges between the pixels in the rows with polarity inversion and the pixels in the rows without polarity inversion is reduced, and consequently, the luminance difference between the pixels in the rows with the polarity inversion. The application duration of the data signals for pixels in rows with polarity inversion is also extended, such that the difference in charge storage between the two rows is reduced.